

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,361	11/06/2003	Melissa Lee Merlau	A01462	8529
21898 7590 09/05/2007 ROHM AND HAAS COMPANY PATENT DEPARTMENT			EXAMINER	
			BARHAM, BETHANY P	
	IDENCE MALL WEST IIA, PA 19106-2399	ARTINIT PAPER NUMBER		PAPER NUMBER
	,		1615	
			MAIL DATE	DELIVERY MODE
	-		09/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(a)			
		Application No.	Applicant(s)			
		10/702,361	MERLAU ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Bethany P. Barham	1615			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	correspondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be the street of the street will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	N. imely filed m the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on 28 Au	ugust 2007.				
2a)⊠	This action is FINAL . 2b) This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.			
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) <u>1 and 7</u> is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) <u>1 and 7</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	vn from consideration.				
Applicat	ion Papers					
9)[The specification is objected to by the Examine	r.				
10)[The drawing(s) filed on is/are: a) acce	epted or b) objected to by the	Examiner.			
	Applicant may not request that any objection to the	· · ·	• •			
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	- · ·				
Priority (under 35 U.S.C. § 119					
a)(Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	tion No ved in this National Stage			
Attachmen	et(s) te of References Cited (PTO-892)	4) 🔲 Interview Summar	y (PTO-413)			
2) Notic 3) Infor	te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) tr No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal 6) Other:	Date			

DETAILED ACTION

Summary

Receipt of Applicant's Response filed on 08/28/2007 is acknowledged. Claims 1 and 7 are pending. Claims 1 and 7 are rejected.

MAINTAINED REJECTIONS

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over 2004/0057923 A9 ('923) or US 2003/0147833 A1 ('833).

The limitations of claims 1 and 7 are taught by '923 or '833:

Both '923 and '833 teach a reshapable hair styling composition comprising,
 optionally in a cosmetically acceptable vehicle, at least one (meth)acrylic
 copolymer which comprises: (a) units derived from at least one monomer chosen
 from butyl (meth)acrylate monomers, (b) units derived from at least one
 monomer chosen from hydroxy alkyl (meth)acrylate monomers, and optionally

Application/Control Number: 10/702,361 Page 3

Art Unit: 1615

units derived from at least one monomer other than the (a) and (b) monomers (abstracts and claims 1-2). Both applications teach at least one additional constituent is chosen from a cationic, anionic, nonionic and amphoteric polymers ('923 claims 21-22 and '833 claims 20-21).

- Both '923 and '833 teach that the at least one (meth)acrylic copolymer comprises

 (a) n-butyl (meth)acrylate, (b) 2-hydroxy ethyl (meth)acrylate and (c) can be methyl (meth)acrylate, ethyl (meth)acrylate, (meth)acrylic acids, etc. ('923 claims 3-12 and '833 claims 3-12). '923 also teaches that (a) can be from about 10 to about 90 weight %, (b) from about 2 to about 50 percent (pg. 1, [0006]).
- The cationic, anionic, nonionic and amphoteric polymers of both '923 and '833 at taught to include: cationic conditioning polymers like Gaffix VC 713 (Tg 85°C, '923 pg. 6, [0062]),
- anionic polymers like acrylate copolymers Acrylidone LM and Luvimer 100 P (Tg ~95°C), Gantrez AN or ES (Gantrez ES 425), Resin 28-2930, Flexan 130 (Tg 112°C, '923 pg. 9-10 [0108, 0111, 0117, 0119-0120]);
- amphoteric polymers including Amphomer LV 71 or Lovocryl 47 (Tg 130°C, '923 pg. 11 [0131]),
- and nonionic polymers including PVP, PVP/VA (Tg 98°C), polyurethanes (Tg 74.5-120°C), etc ('923 pg. 13-14 [0158-0161, 0171]).
- Examiner respectfully points out that the polymers taught by '923 and '833 are
 taught by applicants specification Table 1 to have acceptable high Tg for the 'first
 polymer', pg. 12-13, and thus, like the instant application, the difference in Tg

between the first polymer, an acid-functional polymer, and the second polymer, a copolymer, can be 40° C or more.

- '923 and '833 teach further constituents chosen from reducing agents, silanes, fatty substances, thickeners, plasticizers, anti-foam agents, fillers, sunscreens, etc ('923 claims 21 and '833 claims 20). '833 teaches that the composition is in a form chosen from sprays, aerosols, mousses, gels, sticks, muds, lotions, creams, dispersions, and emulsions (claim 23) and both teach that the composition is "reshapable" providing hair styling that can be restored or modified without new material or heat being applied and is long lasting 10-24 hours without drooping or loss of setting ('833 pg. 2 [0018] and '923 pg. 3 [0026]).
- '923 and '833 do not teach the at least one (meth)acrylic copolymer with a Tg of 20-35°C or a film of specific tensile strength modulus, but do teach in claims 20 a Tg from about –100°C to about 15°C.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to look to '923 and '833 for a composition with cosmetically acceptable vehicle, at least one (meth)acrylic copolymer, and a second polymer for hair styling. One of ordinary skill in the art would know how to optimize the ranges of the Tg for the at least one (meth)acrylic copolymer of '923 and '833, as the MPEP 2144.05 states "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." Especially, since the art teaches a Tg of about 15°C, which reads on the instant claim 1 of Tg of 20°C and one of ordinary skill in the art would know how to obtain a specified glass

transition phase given workable ranges of the monomers disclosed in '923 and '833. Furthermore, both '923 and '833 teach that the hair styling composition is 'reshapable' without new material or heat being applied and is long lasting 10-24 hours without drooping or loss of setting and '833 teaches fixing products such a sprays, gels, mousse, etc which are known in the art to form films and since the specific secondary polymers are disclosed and the monomers of the first polymer taught by the art it would have been prima facie obvious to make the composition of the instant application.

Response to Arguments

Applicant's arguments with respect to claims 1 and 7 have been considered but not persuasive. Applicant argues that a range of Tg that extends to about 15 °C, does not read on the instant claim 1 "second polymer or polymer mixture with a Tg from 20 to 35 °C." The Examiner respectfully disagrees as about 15 °C as taught by '923 and '833 can indeed include a Tg of greater than 15, furthermore the polymers and polymer mixtures as instant claimed are included in the inventions of '923 and '833, and would thus have similar Tg. Because '923 and '833 teach a range of Tg that is so close to applicants and monomers that are the same as applicant it would have been obvious to obtain the second polymer as claimed in the instant invention. With respect to the 'first polymer', Applicant argues that '923 and '833 teach that this component is optional and therefore it is not obvious. However, the Examiner respectfully points out and has outlined above in the rejection the numerous 'first polymers' exemplified in '923 and

'833 that are capable of being combined with the 'second polymer' and are further as taught by applicant in the instant specification as meeting the requirements of the 'first polymer'. The Tg's of these 'first polymers' of '923 and '833 are specifically within the range as claimed in instant claim 1 and are further specifically pointed to in the instant specification Table 1. With so many of these 'first polymer' components being taught, and combined with the '923 and '833 'second polymer' (such as Amphomer LV 71 or Lovocryl 47 (Tg 130°C, '923 pg. 11 [0131]) taught above), it would have been obvious to combine with the 2 polymers as taught by '923 and '833.

Conclusions

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Bethany P. Barham whose telephone number is 571-

272-6175. The examiner can normally be reached on M-F from 8:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Woodward, can be reached on 571-272-8373. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Bethany Barham Examiner 1615

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1600